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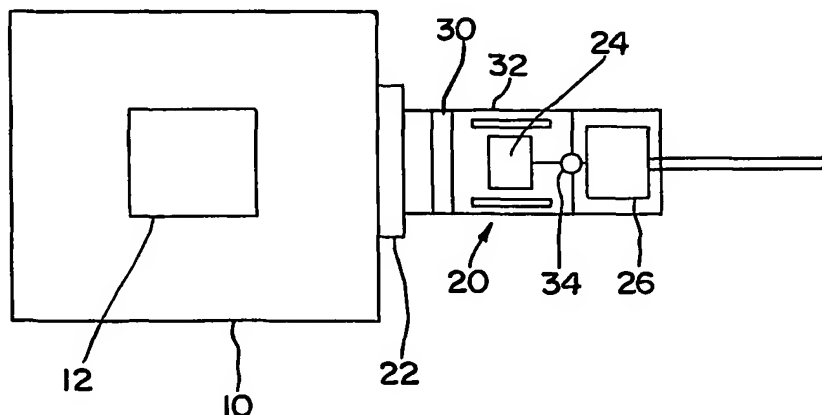
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(54) Title: ~~METHODS AND APPARATUS FOR LEAK DETECTION BY THE ACCUMULATION METHOD~~



(57) Abstract: Methods and apparatus are provided for leak detection by the accumulation method. The apparatus includes a sealable chamber (10) configured to receive a test piece (12) that, while in the chamber, contains a trace gas, a trace gas permeable member (30) in gas communication with the chamber, and a trace gas sensor (20) in gas communication with the permeable member and configured to sense the trace gas that passed from the chamber through the permeable member. The permeable member may be quartz. The trace gas sensor may include an ion pump.